

United States Patent and Trademark Office



UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

DATE MAILED: 01/07/2005

APPLICATION NO.	FILIN	G DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/672,542	09/25/2003		Cheng-Chung Chen	03204-URS	3730
33804	7590	01/07/2005		EXAMINER	
	PATENT S		LE, HOANGANH T		
POST OFFICE BOX 2339 SARATOGA, CA 95070				ART UNIT	PAPER NUMBER
				2821	

Please find below and/or attached an Office communication concerning this application or proceeding.

	Application No.	Applicant(s)					
Office Action Commence	10/672,542	CHEN, CHENG-CHUNG					
Office Action Summary	Examiner	Art Unit					
	HoangAnh T Le	2821					
The MAILING DATE of this communication app Period for Reply	ears on the cover sheet with the c	orrespondence address					
A SHORTENED STATUTORY PERIOD FOR REPLY THE MAILING DATE OF THIS COMMUNICATION. - Extensions of time may be available under the provisions of 37 CFR 1.13 after SIX (6) MONTHS from the mailing date of this communication. - If the period for reply specified above is less than thirty (30) days, a reply If NO period for reply is specified above, the maximum statutory period w - Failure to reply within the set or extended period for reply will, by statute, Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b).	6(a). In no event, however, may a reply be tim within the statutory minimum of thirty (30) days ill apply and will expire SIX (6) MONTHS from cause the application to become ABANDONE	ely filed swill be considered timely. the mailing date of this communication. O (35 U.S.C. § 133).					
Status							
1) Responsive to communication(s) filed on	<u>_</u> .						
2a) ☐ This action is FINAL . 2b) ☑ This	This action is FINAL . 2b)⊠ This action is non-final.						
3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is							
closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213.							
Disposition of Claims							
4)⊠ Claim(s) <u>1-9</u> is/are pending in the application.							
4a) Of the above claim(s) is/are withdrawn from consideration.							
5) Claim(s) is/are allowed.							
· · · · · · · · · · · · · · · · · · ·	6)⊠ Claim(s) <u>1-9</u> is/are rejected.						
7) Claim(s) is/are objected to.							
8) Claim(s) are subject to restriction and/or	election requirement.						
Application Papers							
.9) ☐ The specification is objected to by the Examiner	•						
10)☐ The drawing(s) filed on is/are: a)☐ accepted or b)☐ objected to by the Examiner.							
Applicant may not request that any objection to the o							
Replacement drawing sheet(s) including the correcti	, , , ,	` '					
11) The oath or declaration is objected to by the Ex	aminer. Note the attached Office	Action or form PTO-152.					
Priority under 35 U.S.C. § 119							
12) ☐ Acknowledgment is made of a claim for foreign a) ☐ All b) ☐ Some * c) ☐ None of:		-(d) or (f).					
1. Certified copies of the priority documents have been received.							
2. Certified copies of the priority documents have been received in Application No							
3. Copies of the certified copies of the priority documents have been received in this National Stage							
application from the International Bureau (PCT Rule 17.2(a)). * See the attached detailed Office action for a list of the certified copies not received.							
330 the attached detailed Office action for a list t	or the continue copies not receive	u.					
Attachment(s)							
Notice of References Cited (PTO-892)	4) Interview Summary (
2) Notice of Draftsperson's Patent Drawing Review (PTO-948) 3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) 5) Notice of Informal Patent Application (PTO-152)							
Paper No(s)/Mail Date	6) Other:						

Art Unit: 2821

DETAILED ACTION

1. Applicant's cooperation is requested in correcting any errors of which applicant may become aware in the specification.

Claim Rejections - 35 USC § 112

- 2. The following is a quotation of the second paragraph of 35 U.S.C. 112:
 - The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.
- 3. Claims 8 and 9 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In claim 8, line 3, "the support" has no antecedent basis.

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

- (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.
- 5. Claims 1 and 8-9 rejected under 35 U.S.C. 102(b) as being anticipated by Kraus (the US Patent No. 2,270,314).

The Kraus reference teaches in figure 6 a reflective signal booster adapted to incorporate an omni-directional antenna for improving performance of the antenna, the signal booster comprising: a metallic reflector 13 arranged at a designated angle with

respect to the antenna 17 and substantially parallel to the antenna 17; an angle fixer 19 made of a dielectric material for fixing the reflector and maintaining the angle of the reflector with respect to the antenna; and a support sleeve made of a dielectric material supporting the antenna 17 in position (figure 6). The metallic reflector comprises two reflective surfaces forming a predetermined angle therebetween with the antenna positioned therebetween by the support (figure 6). The metallic reflector is made of two metal plates forming the reflective surfaces (figure 1 and page 2, col. 1, lines 27-28).

Claim Rejections - 35 USC § 103

- 6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
 - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 7. Claims 2 and 6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kraus (cited above) in view of Kudo et al (the US patent No. 5,708,435).

The Kraus reference teaches every feature of the claimed invention, excluding the reflector being made of copper plate or iron plate.

The Kudo et al reference teaches a reflector being made of copper plate or iron plate (col. 5, lines 1-2) in order to improve the performance of the reflector.

Since one of ordinary skill in the art would recognize the benefit of improving the performance of the reflector, it would have been obvious to provide Kraus with the reflector made of copper plate or iron plate as taught by Kudo et al.

Art Unit: 2821

8. Claim 3 is rejected under 35 U.S.C. 103(a) as being unpatentable over Kraus (cited above) in view of Preston (the US Patent No. 4,748,632).

The Kraus reference teaches every feature of the claimed invention, excluding the reflector being made of copper foil.

The Preston reference teaches a reflector being made of copper foil (see abstract) in order to improve the performance of the reflector.

Since one of ordinary skill in the art would recognize the benefit of improving the performance of the reflector, it would have been obvious to provide Kraus with the reflector made of copper foil as taught by Preston.

9. Claims 4 and 6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kraus (cited above) in view of Pai-Chuan et al (the US Patent No. 6,22,488).

The Kraus reference teaches every feature of the claimed invention, excluding the reflector being made of aluminum plate or iron plate.

The Pai-Chuan et al reference teaches a reflector being made of aluminum plate or iron plate (col. 3, lines 29-30) in order to improve the performance of the reflector.

Since one of ordinary skill in the art would recognize the benefit of improving the performance of the reflector, it would have been obvious to provide Kraus with the reflector made of aluminum plate or iron plate as taught by Pai-Chuan et al.

10. Claims 4 and 5 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kraus (cited above) in view of Sparacia et al (the US Patent No. 4,631,409).

The Kraus reference teaches every feature of the claimed invention, excluding the reflector being made of aluminum plate or aluminum foil.

Art Unit: 2821

The Sparacia et al reference teaches a reflector being made of aluminum plate or aluminum foil (col. 3, lines 33-34) in order to improve the performance of the reflector.

Since one of ordinary skill in the art would recognize the benefit of improving the performance of the reflector, it would have been obvious to provide Kraus with the reflector made of aluminum plate or aluminum foil as taught by Sparacia et al.

Claim 7 is rejected under 35 U.S.C. 103(a) as being unpatentable over Kraus (cited above) in view of Rubin et al (the US Patent No. 4,733,246).

The Kraus reference teaches every feature of the claimed invention, excluding the reflector being made of plastic-metal laminated films.

The Rubin et al reference teaches a reflector being made of plastic-metal laminated films (figure 1 and col. 2, line 7) in order to improve the performance of the reflector.

Since one of ordinary skill in the art would recognize the benefit of improving the performance of the reflector, it would have been obvious to provide Kraus with the reflector made of plastic metal laminated films as taught by Rubin et al.

11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to HoangAnh T Le whose telephone number is (571) 272-1823. The examiner can normally be reached on 8:00am-4:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Don Wong can be reached on (571) 272-1834. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Art Unit: 2821

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for

published applications may be obtained from either Private PAIR or Public PAIR.

Status information for unpublished applications is available through Private PAIR only.

For more information about the PAIR system, see http://pair-direct.uspto.gov. Should

you have questions on access to the Private PAIR system, contact the Electronic

Business Center (EBC) at 866-217-9197 (toll-free).

Hoanganh Le Primary Examiner Page 6